WHAT IS CLAIMED:

1. An isolated nucleic acid expression construct comprising:

a myogenic promoter;

a nucleic acid sequence encoding an insulin-like growth factor I ("IGF-I") or functional biological equivalent thereof; and

a 3' untranslated region (3'UTR);

wherein the isolated nucleic acid expression construct is substantially free from a viral backbone; the myogenic promoter, the nucleic acid sequence encoding IGF-I, and the 3'UTR are operably linked; and the isolated nucleic acid expression construct has an *in vivo* expression activity for the encoded IGF-I or functional biological equivalent thereof in a tissue of a subject.

2. The isolated nucleic acid expression construct of claim 1, wherein the myogenic promoter comprises transcriptional loci from a family of MEF-1, MEF-2, TEF-1, SRE or SP.

3. The isolated nucleic acid expression construct of claim 1, wherein the myogenic promoter comprises a nucleic acid sequence that is at least 85% identical to SEQID No.: 3.

4. The isolated nucleic acid expression construct of claim 1, wherein the encoded IGF-I or functional biological equivalent thereof has an amino acid sequence that is at least 85% identical to SEQID No: 4.

5. The isolated nucleic acid expression construct of claim 1, wherein the encoded IGF-I or functional biological equivalent thereof has an amino acid sequence of SEQID No: 4, or SEQID No.:4 with conservative amino acid substitutions.

6. The isolated nucleic acid expression construct of claim 1, wherein the 3'UTR comprises a nucleic acid sequence that is at least 85% identical to SEQID No.: 5 from a skeletal alpha actin gene, or at least 85% identical to SEQID No.: 6 from a human growth hormone gene.

7. The isolated nucleic acid expression construct of claim 1, further comprising a transfection-facilitating vector system.

8. The isolated nucleic acid expression construct of claim 7, wherein the transfection-facilitating vector system is a plasmid, a viral vector, a liposome, or a cationic lipid.

9. The isolated nucleic acid expression construct of claim 1, wherein a construct nucleic acid sequence is at least 90% identical to SeqID#1, or a degenerate variant of SEQID#1.

10. The isolated nucleic acid expression construct of claim 1, wherein a construct nucleic acid sequence is at least 90% identical to SeqID#2, or a degenerate variant of SEQID#2.

11. The isolated nucleic acid expression construct of claim 1, wherein a construct nucleic acid sequence is Seq. ID No. 1 or Seq. ID No. 2.

12. The isolated nucleic acid expression construct of claim 1, further comprising a transfection-facilitating polypeptide.

13. The isolated nucleic acid expression construct of claim 12, wherein the transfection-facilitating polypeptide comprises a charged polypeptide.

14. The isolated nucleic acid expression construct of claim 11, wherein the transfection-facilitating polypeptide comprises poly-L-glutamate.

15. An isolated nucleic acid comprising a sequence at least 95% identical to SeqID#1, or a degenerate variant of SEQID#1.

16. An isolated nucleic acid comprising a sequence at least 95% identical to SeqID#2, or a degenerate variant of SEQID#2.

17. A method for stimulating angiogenesis, or stimulating myogenesis, or elevating levels of an angiogenic factor, or stimulating endogenous production of an angiopoietin, or treating a muscular or vascular complications of diabetes in a subject, comprising:

delivering into a tissue of the subject an isolated nucleic acid expression construct;

wherein;

the tissue comprises cells; and

the isolated nucleic acid expression construct comprises:

a myogenic promoter;

a nucleic acid sequence encoding an insulin-like growth factor I ("IGF-I") or functional biological equivalent thereof; and

a 3' untranslated region (3'UTR);

wherein the isolated nucleic acid expression construct is substantially free from a viral backbone; the myogenic promoter, the nucleic acid sequence encoding IGF-I, and the 3'UTR are operably linked; and the isolated nucleic acid expression construct has an *in vivo* expression activity for the encoded IGF-I or functional biological equivalent thereof in the tissue of the subject.

18. The method of claim 17, wherein the myogenic promoter comprises a nucleic acid sequence that is at least 85% identical to SEQID No.: 3.

19. The method of claim 17, wherein the encoded IGF-I or functional biological equivalent thereof has an amino acid sequence that is at least 85% identical to SEQID No: 4.

20. The method of claim 17, wherein the encoded IGF-I or functional biological equivalent thereof has an amino acid sequence of SEQID No: 4, or SEQID No.:4 with conservative amino acid substitutions.

21. The method of claim 17, wherein the 3'UTR comprises a nucleic acid sequence that is at least 85% identical to SEQID No.: 5 from a skeletal alpha actin gene, or at least 85% identical to SEQID No.: 6 from a human growth hormone gene.

22. The method of claim 17, further comprising: mixing the isolated nucleic acid expression construct with a transfection-facilitating vector system before delivering the isolated nucleic acid expression construct into the tissue of the subject.

23. The method of claim 22, wherein the transfection-facilitating vector system is a plasmid, a viral vector, a liposome, or a cationic lipid.

24. The method of claim 17, wherein a construct nucleic acid sequence is at least 90% identical to SeqID#1, or a degenerate variant of SEQID#1.

25. The method of claim 17, wherein a construct nucleic acid sequence is at least 90% identical to SeqID#2, or a degenerate variant of SEQID#2.

26. The method of claim 17, wherein a construct nucleic acid sequence is Seq. ID No. 1 or Seq. ID No. 2.

27. The method of claim 17, further comprising mixing the isolated nucleic acid expression construct with an effective concentration of a transfection-facilitating polypeptide before delivering the isolated nucleic acid expression construct into the tissue of the subject.

28. The method of claim 27, wherein the transfection-facilitating polypeptide comprises a charged polypeptide.

29. The method of claim 27, wherein the transfection-facilitating polypeptide comprises poly-L-glutamate.

30. The method of claim 17, further comprising electroporating the tissue after the nucleic acid expression construct has been delivered into the tissue of the subject.

31. The method of claim 17, wherein the nucleic acid expression construct is delivered into the tissue of the subject via a single administration.

32. The method of claim 17, wherein the cells of the subject are somatic cells, stem cells, or germ cells.

33. The method of claim 17, wherein the cells of the tissue are diploid cells.

34. The method of claim 17, wherein delivering the nucleic acid expression construct initiates expression of the encoded IGF-I or functional biological equivalent thereof.

35. The method of claim 34, wherein the encoded IGF-I or functional biological equivalent thereof is expressed in tissue specific cells of the subject.

36. The method of claim 35, wherein the tissue specific cells of the subject comprise muscle cells.

37. The method of claim 34, wherein the encoded IGF-I is a biologically active polypeptide; and the encoded functional biological equivalent of IGF-I is a polypeptide that has been engineered to contain a distinct amino acid sequence while simultaneously having similar or improved biological activity when compared to the IGF-I polypeptide.

38. The method of claim 17, wherein the subject is a human, a pet animal, a farm animal, a food animal, or a work animal.

39. The method of claim 17, wherein the angiogenic factor comprises a vascular endothelial growth factor ("VEGF") having an amino acid sequence that is at least 85% identical to SEQID No: 7.

40. The method of claim 17, wherein the angiogenic factor comprises a vascular endothelial growth receptor ("VEGF receptor").